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Abstract

Increased yields of middle distillate products are obtained in a hydrocracking process by the use of a catalyst containing a Beta zeolite which has been hydrothermally treated to adjust the distribution of relatively weak and strong acid sites. The number of strong acid sites is reduced, preferably by steaming at a temperature above 750°C for at least one hour, with the acidity distribution being measured by pyridine IR adsorption values taken at 150°C, and 300°C, and 450°C.